LWG Storm Water Basin Reconnaissance Summary of Findings



Purpose of Recon

- Evaluate the feasibility of sampling in the selected basins
- Identify locations in the basin to collect samples
- Assess equipment and construction requirements

To be Discussed Today...

- Locations with treatment upstream of sampling location
- Unfeasible locations
- City locations

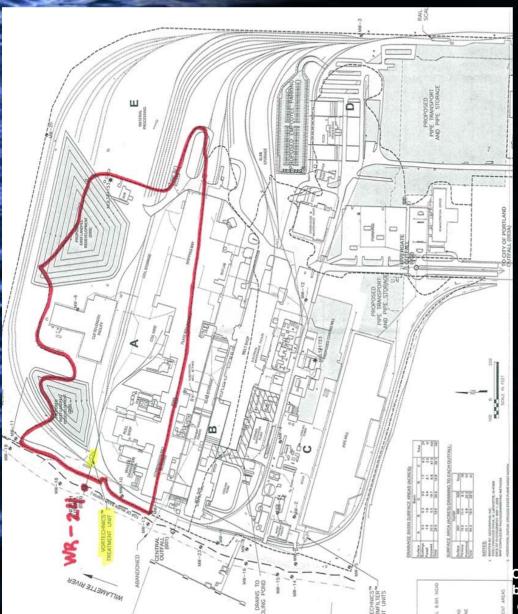


Locations with Treatment Upstream of Sampling Location

- WR-24 Oregon Steel Mills
- WR-107 NWN/Gasco
- WR-66 Siltronic



WR-24 Oregon Steel Mills

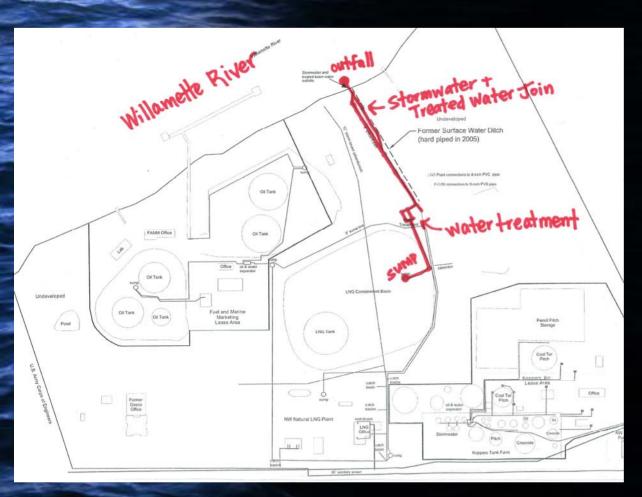


- "Vortechs" system removes sediment, particles, oil and grease from storm water runoff and groundwater
- All runoff at this location is treated before sampling
- Would a different outfall be a better option?

OR CITE by US EPA and its federal, state, change in whole or in part.



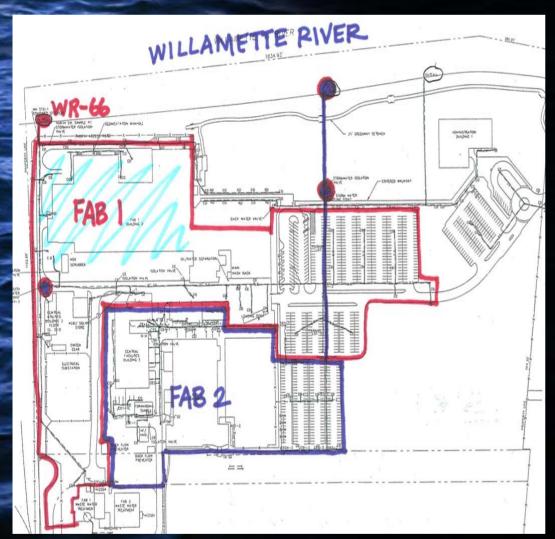
WR-107 NWN/Gasco



- Carbon filter treats groundwater that mixes with untreated storm water before outfall
- Treated flow rate
 = 80-100 gpm
 except in very dry
 periods



WR-66 Siltronic



- Wastewater Treatment Plant treats 1 MGD
- Runoff must be sampled upstream of location where storm water and waste water mix.
- Therefore, only part of basin can be sampled. (Blue highlighted area will not be sampled.)
- Could sample FAB 2 outfall, but standing water has caused increased TSS measurements.



Unfeasible Locations

- WR-6 Rhone-Poulence
 - Replace with?
- WR-148 Gunderson
 - Replace with WR-147



WR-6 Rhone-Poulenc

- All storm water onsite is stored in four 64,000 gallon tanks. A minimum of 25% of this storage is always in tanks. (64,000 gallons is more volume than most storms we are measuring)
- All groundwater is treated by a bioreactor.
- Runoff is pumped via auto level control at a constant rate of 100 gpm to submerged outfall in Willamette River.



WR-148 Gunderson

- WR-148
 - Outfall has been structurally compromised and is scheduled for repair and is located down a steep difficult to access slope.
 - Current land use is primarily unused land with a small parking lot with auto stack building (shipping and receiving of small parts)
- WR-147
 - Catch basin already installed where it will be easy to install the ISCO sampler and sediment traps.
 - Land use is generally the same as WR-148, but more activity. There is more active metal storage in this basin.

City Locations

- All locations accessed through man-holes upstream of outfalls
- Many manholes found to be flooded/backed up with river water
- Basin sampling locations to discuss:
 - OF 22C
 - OF 22B
 - OF M-1
 - OF M-2
 - OF-22
 - OF-16
 - OF-17
 - OF-19





OF 22-C



- Objective =
 Characterize open
 space (Forest Park)
 runoff
- Obstacle = MH is located on police evidence storage lot. Access is limited to 7am-10am M-Th except with special arrangements and background check.





OF 22-B



- Objective =
 Characterize chemical manufacturing runoff
- Sampling MH = AAJ650 (invert elevation = 16.68)



OF M-1



- Proposed sampling MH = AAJ933 at Freightliner (invert = 16.68)
- AAM107 flooded with river water on 1/23/06 (invert = 10.8)
- AAM104 has been paved over
- AAJ935 often flooded (invert = 14.4)



OF M-2



- Proposed sampling MH = AAM 179 (invert = 15.9)
- AAM169 often flooded (invert = 13.4)





- Objective =
 Characterize mixed industrial/highway
- Sampling MH = AMZ120
- City is already monitoring MH AMZ117 and will not be complete until after May

DO NOT QUOTE OR CITE





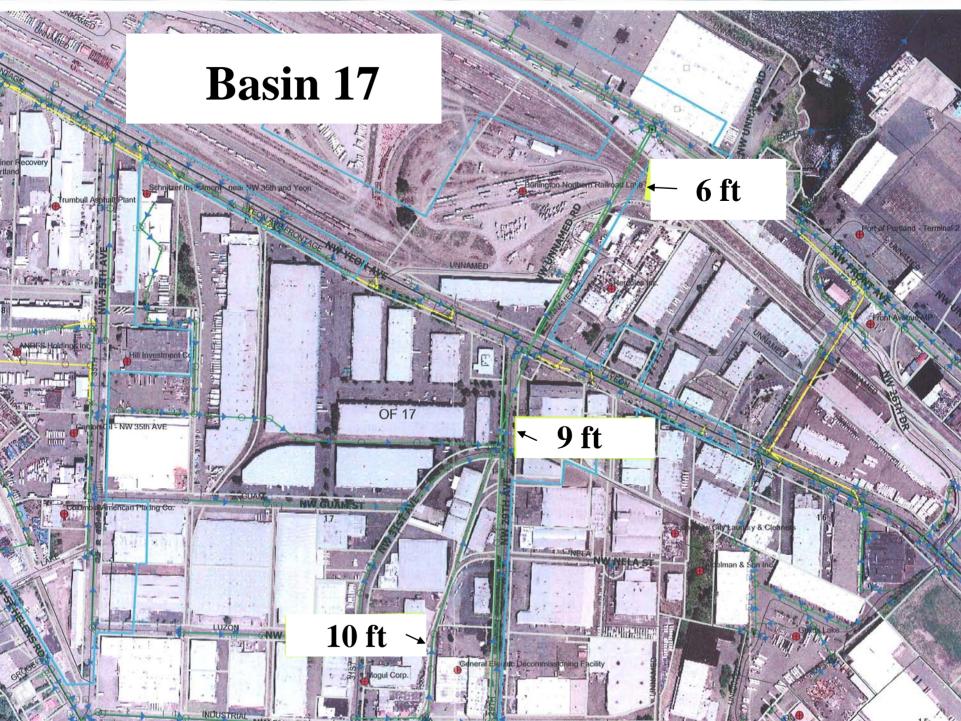
 Obstacle = MH is located in homeland security limited access area. **Need security** clearance to access. This is doable.

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- More than 50% of Basin 17 storm
 drain network is flooded
- Sampling location to be determined...







- Sampling MH = AAJ918 (invert elevation = 17.72)
- City is currently monitoring storm water here but will be complete at end of February



Any questions? DO NOT QUOTE OR CITE This document is currently under review by US EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.